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(**54**) **Title:** METHOD OF PURIFYING A GAS STREAM CONTAMINATED BY CO₂ AND ONE OR MORE HYDROCARBONS AND/OR NITROGEN OXIDES BY ADSORPTION ON AN AGGREGATED ZEOLITIC ADSORBENT

(57) Abstract: The present invention relates to a novel method of purifying a gas stream contaminated by CO2, hydrocarbons and/or nitrogen oxides, in particular a gas stream based an air or a syngas, by adsorption an a bed of aggregated zeolitic adsorbent based an an LSX zeolite or LSX and X zeolites, of which at least 90% of the exchangeable cationic sites of the LSX zeolite or of the LSX/X zeolite blend are occupied by sodium Ions, and the inert binder of which represents at most 5% of the weight of the adsorbent.

